What is claimed is:

1. A nanoporous polymer foam, obtainable by curing microemulsions which comprise at least one aqueous polycondensation-reactive resin, at least one oil component and at least one amphiphile, and subsequently drying.

2. The nanoporous polymer foam according to claim 1, wherein the microemulsion comprises, as the polycondensation-reactive resin, an amino resin.

3. The nanoporous polymer foam according to claim 2, wherein the amino resin is a urea-formaldehyde, benzoguanamine-formaldehyde or melamine-formaldehyde resin.

4. The nanoporous polymer foam according to claim 1, wherein the microemulsion comprises at least one reactive amphiphile.

5. The nanoporous polymer foam according to one of claims 1 to 4, wherein the oil phase comprises a hydrocarbon, alcohol, ketone, ether or alkyl ester, or a mixture of the substances mentioned having a boiling point at atmospheric pressure below 120°C.

6. The nanoporous polymer foam according to any of claims 1 to 5, wherein the bulk density is in the range from 5 to 200 g/l.

7. The nanoporous polymer foam according to any of claims 1 to 6, wherein the average pore diameter is in the range from 10 to 1000 nm, preferably from 30 to 300 nm.

8. A process for producing nanoporous polymer foams, comprising the stages of

   a) providing a polycondensation-reactive resin
   b) preparing a microemulsion comprising an oil phase, an amphiphile and an aqueous solution of a curing agent and/or curing catalyst for the polycondensation-reactive resin,
   c) combining the solution of the polycondensation-reactive resin from stage a) with the microemulsion from stage b) and curing the reactive components,
   d) drying to obtain the structure of the cured microemulsion.

9. The process according to claim 8, wherein a urea-formaldehyde or melamine-formaldehyde resin is used as the polycondensation resin.

10. The process according to claim 8 or 9, wherein the microemulsion comprises at least one reactive amphiphile.

11. The process according to any of claims 8 to 10, wherein an organic or inorganic acid is used as the curing catalyst.

12. The process according to one of claims 8 to 10, wherein the oil phase used is a hydrocarbon, alcohol, ketone, ether or alkyl ester, or mixture thereof having a boiling point at atmospheric pressure below 120°C, and the oil phase is removed by evaporation.